Electric Winch

12V/24V permanent magnet DC motor

Assembly & Operation Instructions

☐Winch 1500lbs
☐Winch 2000lbs
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☐Winch 3000lbs
☐Winch 3500lbs
☐Winch 4000lbs
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1500LB, WINCH SPECIFICATIONS

Rated line pull	1500LBS(680kgs)single line
Motor	Permanent magnet, 0.7kw/1.0hp
Gear reduction ratio	153:1
Gear train	Dierential Planetary
Cable(Dia×L)	Dimaete (4mm) Length (15m)
Control	Remote switch
Drum size(Dia×L)	¢32X72mm
Clutch	Sliding Ring Gear
Braking action	Automatic In-The-Drum
Overall dimensions(L×W×H)	300X105X105mm
Mounting bolt pattern	3.13″ (79.5mm) Φ8.5
Weight	N.W.7kg G.W.8kg
Packing size	34X26X35 2PC

Pull, Speed, Amperes, Volts(First Layer)

Line Pull (lbs./kg)	Line Speed FPM(m/min)	Motor (Amps)
0	10.5ft (3.2m)	8
500(227)	9.2ft (2.8m)	30
1,000(454)	7.2ft (2.2m)	60
1,500(680)	5.2ft (1.6m)	90

Line Pull And Rope Capacity In Layer

Layer	Rated Line Pull (Ibs./kgs)	Total Rope On Drum (ft/m)
1	1500(680)	6.6(2.0)
2	1227(557)	14.0(4.3)
3	1038(470)	23.5(7.2)
4	899(408)	35.0(10.6)
5	793(360)	47.0(14.4)
6	709(322)	50.0(15.0)

2000LB, WINCH SPECIFICATIONS

Rated line pull	2000LBS (907kgs) single line
Motor	Permanent magnet, 0.8kw/1.1hp
Gear reduction ratio	153 : 1
Gear train	Dierential Planetary
Cable (Dia×L)	Dimaete (4mm) Length (15m)
Control	Remote switch
Drum size (Dia×L)	¢32X72mm
Clutch	Sliding Ring Gear
Braking action	Automatic In-The-Drum
Overall dimensions (L×W×H)	300X105X105mm
Mounting bolt pattern	3.13" (79.5mm) Φ8.5
Weight	N. W. 7kg G. W. 8kg
Packing size	34X26X35 2PC

Pull, Speed, Amperes, Volts(First Layer)

Line Pull (lbs./kg)	Line Speed FPM(m/min)	Motor (Amps)
0	10.5ft (3.2m)	8
500(227)	9.2ft (2.8m)	30
1,000(454)	7.2ft (2.2m)	60
1,500(680)	5.2ft (1.6m)	90
2,000(907)	2.9ft (0.9m)	120

Line Pull And Rope Capacity In Layer

Layer	Rated Line Pull (Ibs./kgs)	Total Rope On Drum (ft/m)
1	2000(907)	6.6(2.0)
2	1630(740)	14.0(4.3)
3	1380(620)	23.5(7.2)
4	1190(540)	35.0(10.6)
5	1050(470)	47.0(14.4)
6	940(420)	50.0(15.0)

2500LB, WINCH SPECIFICATIONS

Rated line pull	2500LBS(1130)single line
Motor	Permanent magnet, 0.9kw/1.2hp
Gear reduction ratio	153 : 1
Gear train	Dierential Planetary
Cable(Dia×L)	Dimaete (4.8mm) Length (12.2m)
Control	Remote switch
Drum size(Dia×L)	¢32X72mm
Clutch	Sliding Ring Gear
Braking action	Automatic In-The-Drum
Overall dimensions(L×W×H)	310X105x106mm
Mounting bolt pattern	3.13″ (79.5mm)Φ8.5
Weight	N.W. 7kg G.W. 8kg
Packing size	34X26X35cm 2PC

Pull, Speed, Amperes, Volts(First Layer)

Line Pull (lbs./kg)	Line Speed FPM(m/min)	Motor (Amps)
0	10.8ft (3.3m)	12
1,000(454)	8.2ft (2.5m)	60
2,000(907)	3.6ft (1.1m)	100
2,500(1134)	2.6ft (0.8m)	120

Line Pull And Rope Capacity In Layer

Layer	Rated Line Pull (Ibs./kgs)	Total Rope On Drum (ft/m)
1	2500(1134)	5.6(1.7)
2	1985(900)	12.4(3.8)
3	1650(748)	21.0(6.4)
4	1410(639)	31.0(9.5)
5	1230(558)	40.0(12.2)

3000LB, WINCH SPECIFICATIONS

Rated line pull	3000LBS(1361kgs) single line
Motor	Permanent magnet, 1.0kw/1.3hp
Gear reduction ratio	153:1
Gear train	Dierential Planetary
Cable(Dia×L)	Dimaete(4.8mm) Length (12.2m)
Control	Remote switch
Drum size(Dia×L)	¢32X72mm
Clutch	Sliding Ring Gear
Braking action	Automatic In-The-Drum
Overall dimensions(L×W×H)	310X105x106mm
Mounting bolt pattern	3.13" (79.5mm) ϕ8.5
Weight	N.W.7kg G.W.8kg
Packing size	34X26X35cm 2PC

Pull, Speed, Amperes, Volts(First Layer)

Line Pull (lbs./kg)	Line Speed FPM(m/min)	Motor (Amps)
0	10.8ft (3.3m)	12
1,000(454)	8.2ft (2.5m)	60
2,000(907)	3.6ft (1.1m)	100
3,000(1361)	2.6ft (0.8m)	130

Line Pull And Rope Capacity In Layer

Layer	Rated Line Pull (Ibs./kgs)	Total Rope On Drum (ft/m)
1	3000(1361)	4.9(1.5)
2	2320(1052)	11.5(3.5)
3	1890(858)	19.3(5.9)
4	1590(720)	28.5(8.7)
5	1380(620)	40.0(12.2)

3500LB, WINCH SPECIFICATIONS

Rated line pull	3500LBS(1590kgs)single line
Motor	Permanent magnet,1.1kw/1.5hp
Gear reduction ratio	153 : 1
Gear train	Dierential Planetary
Cable(Dia×L)	Dimaete (5.3mm) Length (10m)
Control	Remote switch
Drum size(Dia×L)	Dimaete (¢37mm) X (72mm)
Clutch	Sliding Ring Gear
Braking action	Automatic In-The-Drum
Overall dimensions(L×W×H)	316X120x106mm
Mounting bolt pattern	3.13″ (79.5mm)Φ9
Weight	N.W.8kg G.W.9kg
Packing size	43X30.5X36cm 2PC

Pull, Speed, Amperes, Volts(First Layer)

Line Pull (lbs./kg)	Line Speed FPM(m/min)	Motor (Amps)
0	10.8ft (3.3m)	12
1,000(454)	8.2ft (2.5m)	60
2,000(907)	3.6ft (1.1m)	100
3,500(1590)	2.6ft (0.8m)	130

Line Pull And Rope Capacity In Layer

Layer	Rated Line Pull (Ibs./kgs)	Total Rope On Drum (ft/m)
1	3500(1590)	4.9(1.5)
2	2320(1052)	11.5(3.5)
3	1890(858)	19.3(5.9)
4	1590(720)	28.5(8.7)
5	1380(620)	32.3(10.0)

4000LB. WINCH SPECIFICATIONS

Rated line pull	4000LBS (1814kgs) single line
Motor	Permanent magnet, 1.2kw/1.6hp
Gear reduction ratio	153 : 1
Gear train	Dierential Planetary
Cable (Dia×L)	Dimaete (5.3mm) Length (10m)
Control	Remote switch
Drum size (Dia×L)	¢37mm X 72mm
Clutch	Sliding Ring Gear
Braking action	Automatic In-The-Drum
Overall dimensions (L×W×H)	316X120x106mm
Mounting bolt pattern	166mm*76mm, Φ9
Weight	N. W. 8kg G. W. 9kg
Packing size	43X30.5X36cm 2PC

Pull, Speed, Amperes, Volts(First Layer)

Line Pull (lbs./kg)	Line Speed FPM(m/min)	Motor (Amps)
0	10.8ft (3.3m)	12
1,000(454)	8.2ft (2.5m)	60
2,000(907)	3.6ft (1.1m)	100
4,000(1814)	2.6ft (0.8m)	130

Line Pull And Rope Capacity In Layer

Layer	Rated Line Pull (Ibs./kgs)	Total Rope On Drum (ft/m)
1	4000(1814)	4.9(1.5)
2	3000(1360)	11.5(3.5)
3	1890(858)	19.3(5.9)
4	1590(720)	28.5(8.7)
5	1380(620)	32.3(10.0)

4500LB, WINCH SPECIFICATION

Rated line pull	4500LBS(2041kgs)single line
Motor	Permanent magnet, 1.4kw/1.9hp
Gear reduction ratio	153:1
Gear train	Dierential Planetary
Cable(Dia×L)	Dimaete(5.3mm)Length(10m)
Control	Remote switch
Drum size(Dia×L)	¢37mm X 72mm
Clutch	Sliding Ring Gear
Braking action	Automatic In-The-Drum
Overall dimensions(L×W×H)	316X120x106mm
Mounting bolt pattern	166mm*76mm, ф9
Weight	N.W.9kg G.W.10kg
Packing size	43X30.5X36cm 2PC

Pull, Speed, Amperes, Volts(First Layer)

Line Pull (lbs./kg)	Line Speed FPM(m/min)	Motor (Amps)
0	10.8ft (3.3m)	12
1,000(454)	8.2ft (2.5m)	60
2,000(907)	3.6ft (1.1m)	100
4,500(2041)	2.6ft (0.8m)	140

Line Pull And Rope Capacity In Layer

Layer	Rated Line Pull (Ibs./kgs)	Total Rope On Drum (ft/m)
1	4500(2041)	4.9(1.5)
2	3520(1597)	14.2(4.4)
3	2600(1197)	18.7(5.8)
4	2050(930)	26.1(8.1)
5	1630(739)	32.3(10.0)

INTRODUCE

Thank you for purchasing a 1500lbs/2000lbs/2500lbs/3000lbs/3500lbs/4000lbs/4500lbs winch from our company. You will need this manual for the safety warnings and cautions, assembly instructions, operating procedures, maintenance procedures, trouble shooting, parts list, and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep both this manual and your invoice in a safe, dry place for future reference.

PROCUCT FEATURES

1. Convenient, portable power for pulling boats, stuck vehicles and other heavy item.
2. Powerful 1500lbs—4500lbs pulling power.
3. 12Volt powered for convenient use without extension cords or small gas engines.
4. Portable, with built-in carrying handle and quick-attach mounting plate.

NOTICE

The Warnings, Cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factor are factor with cannot be built into this product, but must be supplied by the operator.

SAFTY WARNING AND PRECAUTIONS

Your winch is very powerful machine. If used unsafe or improperly, there is a possibility that property damage or personal injury could result.

WARNING:

The responsibility for safe installation and operation of the winch and prevention of operation of personal injury and property damage ultimately rests with you, the operator. There is no substitute for the use of good judgment and caution in operating a winch.

READ ALL INSTRUCTION BEFORE USING THIS TOOL!

1. OBSERVE WORK AREA CONFITIONS. Do not use machines or power tools in damp or wet locations. Do not expose to rain. Do not use electrically powered tools in the presence of flammable gases or liquids.
2. KEEP CHILDREN AWAY. Do not let them handle machines, tools or extension cords.
3. DRESS PROPERLY. Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
4. DO NOT OPERATE TOOL IF UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.
5. KEEP HANDS AND BODY FROM FAIRLEAD WHEN OPERATE.
6. DO NOT LIFT ITEMS VERTICALLY. The winch was designed for horizontal use only.
7. NEVER WINCH LESS THAN 5 TURNS OF WIRE ROPE AROUND THE WINCH DRUM.

The wire rope end fastener may not withstand full load.

8. DO MOVE VEHICLE WITH CABLE EXTENDED AND ATTACHED TO LOAD TO PULL IT. The cable could snap.

9. USE GLOVES WHILE HANDING CABLE. Do not let wire rope slide through your hand.

10. DO NOT VOERLOAD. For load over1/2 rated capacity, we recommend the use of the optional pulley block to double line the wire rope.

11. THE VEHICLE ENGING SHOULD BE RUNNING DURING WINCH OPERATION. If considerable winching is performed with the engine off. The battery may be too weak to restart the engine.

12. USE A NYLON SLING Never hook the wire rope back onto itself because you could damage the wire rope.

13. NEVER USE YOUR WINCH FOR LIFTING OR MOVING PEOPLE.

14. AVOID CONTINUOUS PULLS FROM EXTREME ANGLES. This will because the rope to pile up on the end of the drum.

15. NEVER RELEASE FREES POOL CLUTH WHEN THERE IS A LOAD IN THE WINCH.

16. DISCONNECT POWER. Always disconnect winch power leads to battery before working in or around the winch drum so that the winch cannot be turned on accidentally.

17. When moving a load, slowly take up the wire rope slack until is become taut. Stop, recheck all winching connections. Be sure the hook is properly seated. If a nylon sling is used, check the attachment to the load.

18. When using your winch to move a load, place the vehicle brake, and chock all wheels.

19. DO NOT USE THE WINCH TO HOLD LOAD IN PLACE, Use other means of securing loads such as tie down straps.

20. DO NOT MACHINE OR WELD ANY PERT OF THE WINCH. Such alterations may weaken the structural integrity of the winch and could void your warranty.

21. USE STIPULATES CURRENT. Do not connect winch to either 110v ac house current or 220v mains as winch burnout or fatal shock may occur.

22. KEEP STEADY. Never allow shock loads to be applied to winch or wire rope.

SPECIAL WARNINGS WHEN USING THIS ELECTRIC WINCH

The Cable

Be sure the cable is in good condition, and is attached properly.

Do not use the winch if the cable is frayed.

Do not replace the cable with a cable of lesser strength.

The Battery

Be sure the battery is in goof condition. Avoid contact, with battery acid or other contaminants.

Always wear ANSI approved eye protection when working around a battery.

Have the engine running when using the winch, to avoid ruing the battery down.

Stand Back

Stay out of the direct line that the cable is pulling. If the cable slips or breaks, it will "whiplash" along this line.

Keep hands, clothing, hair and jewelry clear of the winch while in use.

Use a spotter to assist you in assuring that it is safe to operate the winch. Make sure this person is out of the way of the vehicle and the cable before activating the winch.

Power Limits

Do not attempt to exceed the pulling limits of this winch.

Never use the hand crank to "assist" the winch. This will damage the winch and may cause personal injury.

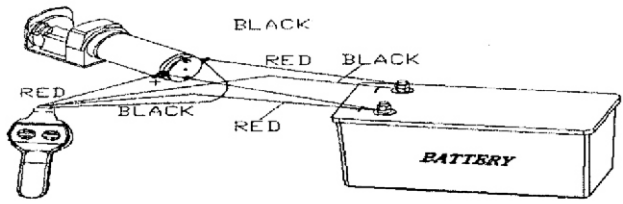
INETALLATION

Wiring your Electric Winch

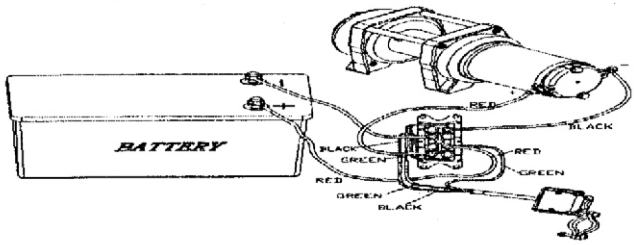
Power Limits
Do not attempt to exceed the pulling limits of this winch.
Never use the hand crank to "assist" the winch. This will damage the winch and may cause personal injury.
INSTALLATION

Wiring your Electric Winch

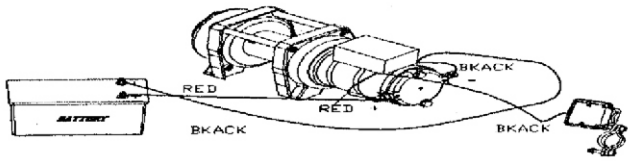
1500lbs—2000lbs



2500lbs—3000lbs



3500lbs



Temporary Wiring

1. Lift the rubber seal, and plug the POWER CABLE into the PLUG on the right side of the winch body. This plug is labeled "power". Route the power Cable from the winch to your battery, being careful to avoid tangling it in moving equipment, or causing a tripping hazard.

2. Connect the Black Clamp Handle of the POWWE CABLE to the frame of your vehicle, establishing a ground connection. Connect the Red Clamp Handle to the Positive (+/Red) terminal of your battery. **Note: Be sure you are using a 12V automotive battery or equivalent, in good condition.**

3. Lift the rubber seal on the left side of winch body. Taking the Remote Control Unit, insert the socket at the end of the cord into the PLUG on the left side of the winch body labeled "Remote Control".

4. Set the remote control aside in a safe place.until ready for use.

Permanent wiring

1. Attach the **OVER-CURRENT PROTECTOR** to the Positive (+/Red) terminal of your battery, using the battery terminal clamp bolt.

2. Plan a rout for the wiring from the point of the vehicle where the winch will be mounted or used to the battery. This route must be secure, out of the way of moving parts, road debris, or any possibility of being damaged by operation or maintenance of the vehicle. For example, you may wish to route the wires under the vehicle, attaching it to the frame using suitable fasteners. Do not attach the wires to the exhaust system, drive shaft, emergency brake cable, fuel line, or any other components winch may create damage to the wiring through heat or motion, or create a fire hazard.

3. If you drill through the bumper or any part of the body to route wires, be sure to install a rubber grommet in the hole to prevent fraying of the wires at that point.

4. Route the **POWER CABLE** from the point the winch will be used to the battery. Following the precautions discussed above.

5. Remove the Red Clamp handle, and attach the red wire to the **OVER-CURRENT PROTECTOR** which is mounted onto the Positive (+/Red) terminal of your battery.

6. Remove the Black Clamp handle, and attach the black wire to the frame of your vehicle,

creating a secure electrical ground.

WARNING

1. Always connect Red to Red (Positive to Positive) and Black to the vehicle's frame, making a ground connection, when using battery power from your vehicle.
2. Never continue use of your winch or other accessory until the battery is completely run down. This can permanently damage your battery!
3. You may wish to keep your engine running while using this winch, to continually recharge the battery. However, exercise extreme caution when working around a running vehicle.
4. Do not use a dirty, corroded or leaking battery. You may suffer injury from and acid burns.

MOUNTING YOUR WINCH

You winch is designed to be mounted temporarily, using the Trailer Hitch Mounting Bracket. However, you may also mount your winch permanently.

Permanent mounting

1. Select a mounting site on the bumper of your vehicle, truck bed, boat trailer, or other suitable location. **NOTE: This winch can generate 1500LBS—4500LBS pulling force. Be sure the location you select can withstand this much force. You may need to use steel reinforcement plates, or weld on additional bracing, depending on the desired mounting location.**
2. Align the winch with the desired location, and mark for drilling the locations of the 4holes on the base of the winch.
3. Drill these locations on your vehicle.

Temporary Mounting

1. Attach the three Plate Stud Bolts to the Adapter Plate, as shown, using the supplied Nuts. Tighten securely.
2. Index the heads of the Plate Studs into the keyhole slots on the back of the winch.
3. Attach the Winch/Adapter Plate assembly to your trailer hitch, by inserting the trailer hitch ball through the shaped hole in the Adapter Plate.

USING YOUR WINCH

1. Put you vehicle in Neutral.(Never winch with your vehicle in Gear or in Park, since this could damage your vehicle's transmission.) **PUT YOUR EMERGENCY BRAKE ON. BLOCK THE INSTRUCTION CAN CAUSE YOUR VEHICLE TO ROLL WHILE, CREATING AN EXTERMELY DANGEROUS SITUATION!!**
2. To pull the cable, turn the **CLUTCH KNOB** counterclockwise to loosen it, and then pull out the cable you need. **ALWAYS LEAVE AT LEAST FIVE TURNS OF CABLE ON THE SPOOL TO PREVENT PULLING THE CABLE OUT OF THE WINCH!**
3. Hook onto the object using a pulling point, tow strap or chain. Never warp the cable around the object Positive and hook onto the cable itself. This can cause damage to the object being pulled,

and kink or fray the cable.

4. Re-tighten the clutch knob.

5. Stand clear, and when it is safe to do so, use the power switch in the remote control to retract the cable, and winch the item as desired.

WARNING

1. Keep hands, Clothing, hair, and jewelry clear of the drum area and cable when winching.

2. Never use the winch if the cable is frayed, kinked or damaged.

3. Never allow anyone to stand near the cable or in line with the cable behind the winch while it is under power. If the cable should slip or break, it can suddenly whip back toward the winch, causing a hazard for anyone in the area. Always stand well to the side while winching.

Warning: Do not use the crank to assist an operating winch. This will damage the winch and may cause personal injury.

1. Turn the clutch knob clockwise until hand tight. Do not force it or over tighten.

2. Place the end of the hand crank over the flattened end of threaded shaft on the left side of the winch.

3. Rotate the hand crank clock clockwise to tighten the cable. Continue to turn until the cable had been completely retracted.

MAINTENANCE

1. Lubricate the cable occasionally with light oil.

2. Grease the gears every 6 months. To do this, remove the clutch knob and separate the left and right housing, Use any good quality waterproof grease.